

A NEW SPECIES OF *LISTERA* FROM NANDADEVI NATIONAL PARK, CHAMOLI DISTRICT, UTTAR PRADESH

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*Botanical Survey of India, Dehra Dun**Listera nandadeviensis* P. K. Hajra *sp. nov.*

Affinis L. nepalensis Balak. a qua differt causa foliae triplinervae, racemi 3-6 flores, petala anguste oblonga, labelli sinus profundus.

Herba terrestris, erecta, gracilis, 13-20 cm alta, radicibus, carnosus fibrosis. Caulis glaber, 9-14 cm altus infra folia. Folia duo opposita, sessilia, ovatocordata, ad apicem acuta, membranacea, 1.5-3.0 cm longa et equaliter lata, glabra, manifeste triplinervia, tenuiter nervia 8-10. Pedunculus 1.0-2.0 cm longus, glandulari-puberulus. Racemus tenuis, 2.0-6.0 cm longus, glandulari-puberulus, 3-6 flores. Flores distanter dispositi in axillis bractearum, virides, 1.5-2.0 cm longi; pedicelli 3-4 mm longi, glaber. Bracteae florales ellipticae vel ovatae, obtusae, 3-4 mm longae, 1-2 mm latae, ovarii stipitato breviores. Sepala subequalia, ovata-lanceolata, subfalcata, 5-6 mm longa, 1.5-2.0 mm lata, membranacea, uninervia. Petala anguste oblonga, 5-6 mm longa, 1 mm lata, uninervia. Labellum lineari-oblongum, 14-15 mm longum, 1.5-2.0 mm latum, triplinervis; apex apice bifidum, terminans in 2 lobis anguste oblongis, cum sino *ca.* 5 mm longo. Columella 2.5-3.0 mm longa, crassa, incurvata. Anthera bilobata, *ca.* 1 mm longa. Ovarium *ca.* 3 mm longum, 2 mm latum.

Typus: P. K. Hajra 73202A, Himtoli, Nandadevi National Park, Chamoli, Uttar Pradesh (Holotypus, CAL); P. K. Hajra 73202B-E (Isotypus, BSD).

Terrestrial, erect, slender herbs, 13-20 cm high with fleshy fibrous roots. Stem 9-14 cm below the leaves, glabrous. Leaves 2, sessile, opposite, broadly ovate-cordate, acute, membranous, 1.5-3.0 cm long, 1.5-3.0 cm broad, glabrous, prominently 3-nerved, faintly 8-10-nerved. Peduncle 1.0-2.0 cm long, glandular-

pubescent. Raceme slender, 2.0-6.0 cm long, glandular-pubescent, 3-6-flowered. Flowers arranged distantly in the axils of the bracts green, 1.5-2.0 cm long; pedicel 3-4 mm long, glabrous. Floral bracts elliptic to ovate, obtuse, 3-4 mm long, 1-2 mm broad, shorter than the stalked-ovary. Sepals subequal, ovate-lanceolate, subfalcate, 5-6 mm long, 1.5-2.0 mm broad, membranous, 1-nerved. Petals narrowly oblong, 5-6 mm long, 1 mm broad, 1-nerved. Lip linear-oblong, 14-15 mm long, 1.5-2.0 mm broad, 3-nerved, apex bifid, lobes narrowly oblong, sinus *ca.* 5 mm long. Column 2.5-3.0 mm long, stout, incurved, with a distinct flap-like rostellum. Anther bilobed, *ca.* 1 mm long. Ovary *ca.* 3 mm long, 2 mm broad. Figs. 1-5.

Allied to *L. nepalensis* Balak. but differs in its leaves being prominently 3-nerved; raceme 3-6-flowered; petals narrowly oblong; lip deeply bifid.

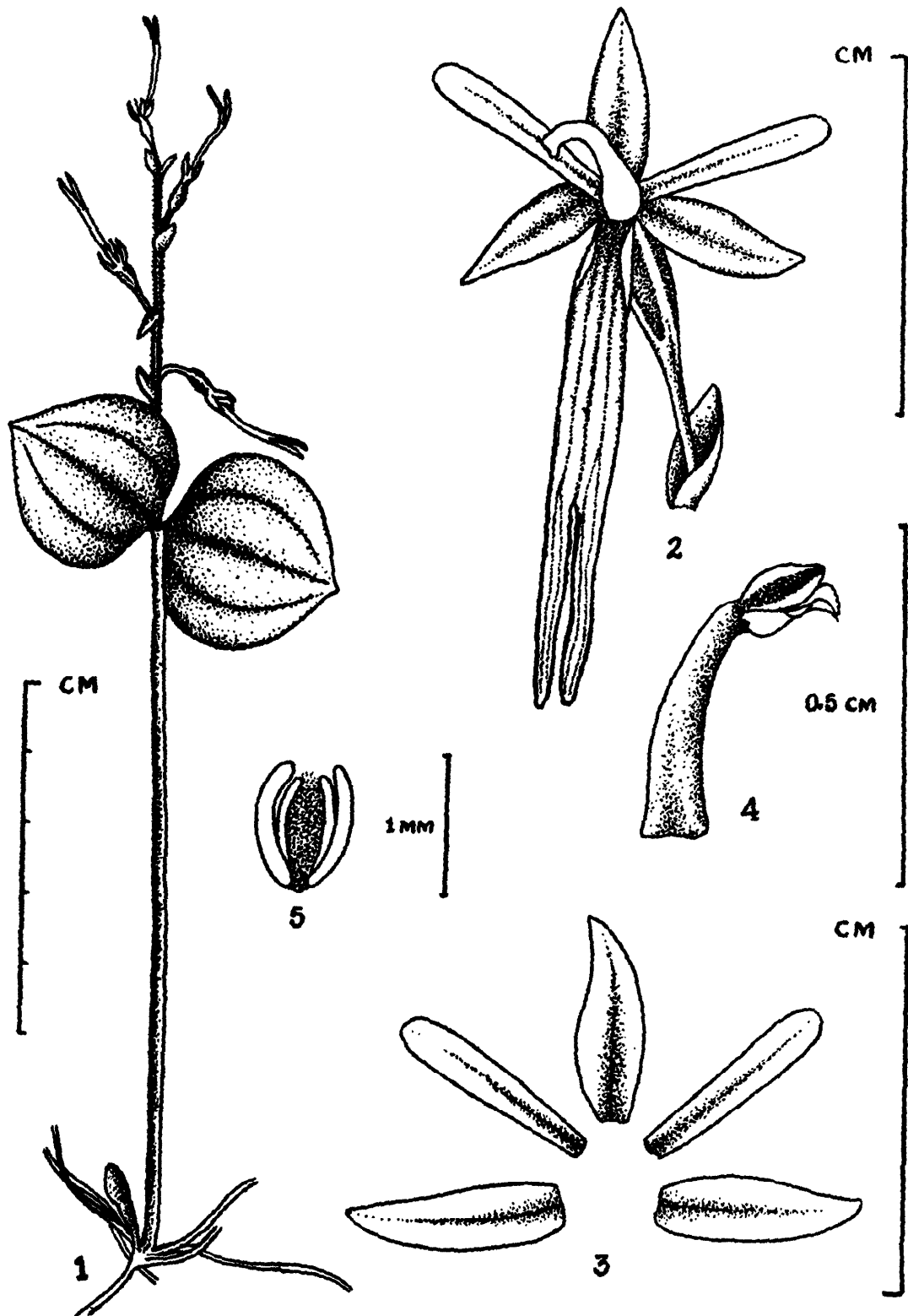
Holotype: P. K. Hajra 73202A Himtoli, Nandadevi National Park, Chamoli District, Uttar Pradesh (CAL); *Isotypes* P. K. Hajra 73202B-E (BSD).

Ecology: On moss covered rocks in *Rhododendron*, *Abies* and *Pinus* forest at altitude varying from 3000-3500 m.

Flowering and fruiting: August-September.

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Listera nandadeviensis P. K. Hajra, sp. nov.

Figs. 1-5: 1. Habit. 2. Flower. 3. Perigones. 4. Column. 5. Anther. Hajra 73202A,